assay file

LITHOLOGIC DESCRIPTION OF SAMPLES SUBMITTED FOR ASSAY L'

Core samples from Savage Oil-Shale Development Company's Whiskey corehole drilled in the NE. 1/4 of sec. 24, T. 4 S., R. 98 W.,

Garfield County, Colorado

Surface elevation 7561 feet Mahogany marker at 547.5 feet Total depth 623 feet

From	То	Description
• 0	31.0	No recovery,
31.0	31.9	Siltstone, tan and light gray, massive. Scattered
		vegetation fragments. Some vertical fracture with
		iron-stained fracture faces.
31.9	33.0	Marlstone, tan and light brown, poorly defined to
		well defined bedding. Some iron staining. Low grade.
33.0	46.0	Siltstone, light gray and blue gray, massive. Common
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		scattered vegetation fragments. Common vertical
		fracture with iron-stained fracture faces. 3.7 feet
		of no recovery within this interval.
46.0	53.0	Siltstone, light gray, massive. Common beds 0.7 foot
		and less of light brown marlstone with poorly defined
		bedding. Common inclusions 1/2 inch and less of
		pyrite.
53.0	59.7	Siltstone, light gray, massive. Rare stringers of
,,,,,,	<i>>></i> • ·	light brown marlstone. Common scattered vegetation
		fragments and pyrite grains.
59.7	64.6	Marlstone, tan and light brown, well defined bedding.
,,,,		Two 0.3-foot bands of light gray, massive, calcareous
		siltstone occur at 61.2 and 61.9 feet. Low grade.
64.6	65.0	Marlstone, dark brown and dark gray, well defined
-40-		bedding. Good grade.
65.0	72.0	Marlstone, tan and light brown, poorly defined to well
	•	defined bedding. Low grade to barren. Common 0.6-
		foot and less bands of light gray, massive siltstone.
		Core badly broken.
72.0	92.8	No recovery.
92.8	99.7	Siltstone and silty marlstone, tan and light gray,
•	,,,,	generally massive to poorly defined and lightly con-
		torted bedding. Barren.
99.7	109.7	No recovery.
109.7	112.0	Siltstone, light gray, massive. Interbedded with 1-
		inch and less bands of very fine grained sandstone.
112.0	113.5	No recovery.
113.5	129.0	Marlstone, tan and light gray, poorly defined to well
		defined bedding. Interbedded with light gray, massive
		siltstone. Barren. Some vertical fracture with frac-
		ture faces lightly coated with pyrite grains.
129.0	141.0	Marlstone, silty, tan and light gray, well defined and
,	+ - * -	highly contorted bedding. Barren. Some vertical
		fracture.
141.0	143.1	
141.0 1/By H	NS.	Illustration No. SBR-2716P
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Laramie Petroleum Research Center, Laramie, Wyoming

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Garfield County, Colorado (Con.)

From	То	Description
143.1	151.0	Siltstone, tan and light gray, massive. Common stringers of light brown barren marlstone.
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151.0	153.0	No recovery.
153.0	154.0	Siltstone, light gray, massive. Marlstone, tan and light brown, poorly defined to well
154.0	157.3	defined and lightly contorted bedding. Barren.
157.3	160.2	Siltstone, light gray, massive.
160.2	167.7	Marlstone, tan and light brown, poorly defined to well defined and contorted bedding. Rare bands 0.4 foot and less of light gray massive siltstone. Barren.
167.7	171.9	Siltstone, tan and light gray, massive. Common 1/4-inch and less inclusions of pyrite.
171.9	174.7	Marlstone, tan and light brown, poorly defined to well defined bedding. Common inclusions 1/2 inch and less of blue-gray analcite. Low grade to barren.
174 .7	175.8	Marlstone, dark brown and dark gray, well defined bedding A 1-inch band of light gray siltstone occurs at 175.6 feet. Good grade.
175.8	176.3	Marlstone, tan and light brown, well defined bedding. Barren.
176.3	184.2	Siltstone, tan and light gray, massive. Some vertical fracture with fracture faces lightly coated with pyrite grains.
184.2	186.8	Sandstone, tan and light gray, fine grained, massive. Common bands grading to siltstone. Rare 1/2 inch and less inclusions of pyrite.
186.8	192.8	Siltstone, tan and light gray, massive. Rare stringers of light brown marlstone. Some vertical fracture with iron-stained fracture faces.
192.8	196.4	Marlstone, light brown and dark brown, well defined and contorted bedding. Low grade.
196.4	205.1	Siltstone, tan and light gray, massive. Common bands 0.3 foot and less of light brown marlstone. A 0.3- foot band of dark gray marlstone occurs at 197.2 feet.
205.1	207.3	Siltstone, light gray, massive. Extensive vertical fracture with fracture faces lightly coated with pyrite. One foot of no recovery within this interval.
207.3	211.2	Marlstone, light brown and dark brown, well defined bedding. A 0.4-foot band of light gray siltstone occurs at 208.0 feet. A 0.6-foot band of dark gray marlstone occurs at 208.4 feet. One foot of no recovery within this interval. Illustration No. SBR-2717P

Core samples from Savage Oil-Shale Development Company's Whiskey corehole drilled in the NE. 1/4 of sec. 24, T. 4 S., R. 98 W.,
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From	To	Description
211.2	211.9	Marlstone, dark gray, massive. Good grade.
211.9	218.0	Marlstone, light brown and dark brown, massive to well
		defined bedding. Common crystal cavities 1-1/2 inches
	•	and less filled with light gray and blue-gray calcite
	**	crystals. One and one-half feet of no recovery within
		this intermed. Core hadle freetuned and brokery within
218.0	230.0	this interval. Core badly fractured and broken.
210.0	250.0	Marlstone, tan, light brown, and dark brown. Massive to
	•	well defined bedding. Common crystal cavities 1-1/2
		inches and less filled with blue-gray and clear calcite
		crystals and coated with reddish-brown bitumen. Calcite
		partings occur from 229.2 to 230.0 feet. Core fractured
		and broken. 0.9 foot of no recovery within this interval.
230.0	238.0	Marlstone, light gray, tan and light brown, massive to
		well defined bedding. Numerous broken zones of poor
_	.	recovery.
238.0	243.9	Marlstone, light brown, dark brown, and dark gray, generally
		massive to poorly defined bedding. Rare stringers and in-
		clusions 1/2 inch and less of analcite and calcite crystals
		1.5 feet of no recovery within this interval.
243.9	248.6	No recovery.
248.6	254.1	Marlstone, light gray, light brown, and dark brown, massive
	->-,	to poorly defined and contorted bedding. Common bands
	•	0.3 foot and loss of light more and blue common bands
254.1	256.3	0.3 foot and less of light gray and blue-gray siltstone. Siltstone, light gray, massive.
256.3	260.1	Manistana light gray, massive.
	200 44	Marlstone, light gray, tan, and light brown, well defined
		and lightly contorted bedding. A 0.3-foot band of light
		gray siltstone occurs at 256.7 feet. Low grade. No re-
260.1	263.0	covery between 257.0 and 259.0 feet.
200.1	205.0	Marlstone, light brown, dark brown, and dark gray, well
		defined bedding. A ().3-foot band of light gray silt-
		stone occurs at 260.9 feet. A 1-inch contorted band of
0/0 0	240	blue-gray analcite occurs at 261.5 feet. Good grade.
263.0	268.2	Siltstone, light gray, massive. Extensive vertical frac
		ture with fracture faces lightly coated with reddish-
		brown and black bitumen. No recovery between 264.0 and
		266.0 feet.
268.2	270.1	Marlstone, light gray and light brown, well defined
		bedding. Some vertical fracture with fracture faces
		lightly coated with reddish-brown bitumen.
270.1	273.1	Maristone light brown don't brown and to
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Marlstone, light brown, dark brown, and dark gray, massive
		to well defined bedding. Some vertical fracture with
		fracture faces lightly coated with clear calcite crystals
	•	and reducisi-brown bitumen. Good grade. A 1/2-inch im
		regular band of tan siltstone containing analcite and
		calcite crystals occurs at 271.3 feet.
		Illustration No. SBR-2718P

Core samples from Savage Oil-Shale Development Company's Whiskey corehole drilled in the NE. 1/4 of sec. 24, T. 4 S., R. 98 W.,

Garfield County, Colorado (Con.)

From	To	Description
273.1	277.1	Marlstone, light brown and dark brown, massive to poorly defined bedding. Rare irregular tan analcite stringers. Core badly fractured and broken. Fracture faces are lightly coated with reddish-brown and black bitumen.
277.1	281.5	Marlstone, dark brown and dark gray, generally massive to well defined bedding. Good grade. No recovery between 279.2 and 279.8 feet.
281.5	289.6	Marlstone, silty, tan, and light gray, poorly defined and highly contorted bedding. Interbedded with siltstone, light gray, massive. Some vertical fracture with fracture faces lightly coated with reddish-brown bitumen. No recovery between 283.0 and 289.0 feet.
289.6	291.3	Marlstone, light brown, poorly defined to well defined bedding.
291.3	312.0	Marlstone, light brown and dark brown, massive to well defined bedding. Common stringers of tan calcite-enriched marlstone.
312.0	315.1	Marlstone, light brown and dark brown, well defined bedding. Common vertical fracture with fracture faces lightly coated with reddish-brown bitumen.
315.1	320.0	No recovery.
320.0	321.9	Marlstone, light brown and dark brown, well defined bedding. A 0.4-foot band of tan, massive siltstone occurs at 320.0 feet.
321.9	325.6	Siltstone, tan, massive to poorly defined and irregular bedding. Common stringers of light brown bedded marlstone. Rare vertical fracture with fracture faces iron stained.
325.6	326.4	Marlstone, light brown and dark brown, well defined bedding.
326.4	328.2	Marlstone, dark brown and dark gray, well defined bedding. Good grade.
328.2	336.6	Marlstone, light brown and dark brown, well defined bedding
336.6	339•7	Marlstone, light brown and dark brown, well defined bedding Extensive vertical fracture with fracture faces lightly coated with calcite and reddish-brown bitumen.
339.7	341.7	Marlstone, dark brown and dark gray, well defined bedding.
341.7	344.9	Marlstone, light gray and tan, well defined bedding. Low grade.
344.9	347.2	Marlstone, dark brown and dark gray, massive to well defined bedding. A 0.2-foot band of light brown marlstone occurs at 345.3 feet. A 1/2-inch band of tan siltstone occurs at 345.6 feet. Good grade.

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From	То	Description
347.2	358.3	Marlstone, light brown and dark brown, massive to well defined bedding. Common vertical fractures with fracture faces lightly coated with calcite and reddish-brown bitumen.
358.3	359•3	Marlstone, dark gray, massive. Good grade.
359.3	367.5	Marlstone, light brown and dark brown, well defined bedding. Some vertical fracture with fracture faces lightly coated with granular pyrite.
367.5	368.3	Marlstone, dark brown and dark gray, massive to poorly defined bedding.
368.3	374.6	Marlstone, light brown and dark brown, generally massive to poorly defined bedding. Common vertical fracture with fracture faces lightly coated with dirty white calcite.
374.6	376.1	Marlstone, dark brown and dark gray, massive to well defined bedding. Good grade.
376.1	379.8	Marlstone, tan and light brown, well defined bedding. Low grade.
379.8	380.8	Marlstone, dark gray, massive to well defined bedding. Rich.
380.8	385 •14	Marlstone, light brown and dark brown, massive to poorly defined bedding. Rare vertical fracture with fracture faces lightly coated with dark brown bitumen. One-inch and less fractures occur at 383.0 and at 383.9 feet with fracture faces coated with a light gray film containin analcite, quartz and carbonates. A 1/2-inch band of dark
385.4	389.3	brown bitumen occurs at 385.4 feet. Marlstone, light gray and light brown, well defined bedding. Vertical fracture with fracture faces lightly coated with reddish-brown bitumen.
389.3	395•9	Marlstone, light brown, dark brown, and dark gray, poorly defined to well defined bedding. 0.5-foot bands of tan siltstone containing stringers of dark brown marlstone and small inclusions of analcite crystals and black bitumen occur at 391.5 feet and 393.6 feet.
395.9	397•5	Marlstone, dark brown and dark gray, massive. Good grade to rich.
397.5	400.7	Marlstone, light brown and dark brown, well defined bed- ding. A 0.1-foot band of tan siltstone containing stringers of dark brown marlstone occurs at 397.5 feet.

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Marlstone, tan and light brown, well defined bedding. Marlstone, tan and light brown, well defined bedding. Some vertical fracture with fracture faces heavily coated with reddish-brown bitumen. Marlstone, light brown and dark brown, massive to a defined bedding. Common bands 0.2 foot and less tan siltstone containing stringers of dark brown in stone. Extensive vertical fracture with faces lightly coated with reddish-brown bitumen. No recovery be 403.0 feet and 405.2 feet and between 407.0 feet a 408.8 feet. Marlstone, tan, light brown and dark brown, well defined bedding. Some vertical fracture with fracture fact lightly coated with calcite and reddish-brown bitumen. Marlstone, dark brown and dark gray, poorly defined well defined bedding. Good grade. Siltstone, tan, massive. Contains numerous irregul stringers of dark brown marlstone. A 0.1-foot ban of dark brown marlstone occurs at 417.7 feet. Marlstone, light brown and dark brown, massive to we defined bedding. Some vertical fracture with fractaces lightly coated with clear calcite. A 0.3-foot band of tan siltstone containing stringers of dark brown marlstone occurs at 419.4 feet. Marlstone, light brown and dark brown, massive to we defined bedding. A 0.2-foot band of tan siltstone containing stringers of dark brown marlstone occurs at 419.9 feet. Marlstone, light brown and dark brown, massive to we defined bedding. A 0.2-foot band of tan siltstone containing stringers of dark brown marlstone occurs at 419.9 feet. Marlstone, light brown and dark brown, massive to we defined bedding. A 0.2-foot band of tan siltstone containing stringers of dark brown marlstone occurs at 419.9 feet. Marlstone, light brown and dark brown, poorly defined bedding. A 0.2-foot band of tan siltstone containing stringers of light gray analcite. Some	
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434.0 439.4 439.4 Land to well defined and slightly contorted bedding. Reconstructed by the stringers of dark brown marlstone occur 424.9 feet. No recovery from 426.4 feet to 432.5 marlstone, light brown and dark brown, poorly defined to well defined and slightly contorted bedding. Reconstructed stringers of light gray analysis.	:11
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Illustration No. SBR-2721P	

Core samples from Savage Oil-Shale Development Company's Whiskey corehole drilled in the NE. 1/4 of sec. 24, T. 4 S., R. 98 W.,

Garfield County, Colorado (Con.)

From	To	Description
457.1	460.3	Analcitized tuff, very fine grained, tan and light gray. Numerous bands 1-1/2 inches and less and contorted
460.3	475.2	stringers of dark brown marlstone. (Upper wavy bed.) Marlstone, dark brown, massive to well defined bedding. Common stringers l inch and less long of dark brown analcite. Rare crystal cavities l inch and less lined
475.2	483.0	with calcite crystals. Good grade. Marlstone, tan and light brown, massive to poorly defined bedding. Rare vertical fracture with fracture faces lightly coated with clear calcite. A 45° fracture showing alighensides convergent 177.7.5 foot
483.0	487.0	ture showing slickensides occurs at 477.5 feet. Marlstone, dark brown, massive to poorly defined bedding. A 0.2-foot band of vuggy marlstone containing calcite crystals occurs at 485.0 feet.
487.0	490.6	Marlstone, light gray, light brown and dark brown, well defined bedding. Extensive vertical fracture with fracture faces lightly coated with reddish-brown bitumen and a bluish-white film.
490.6	498.6	Marlstone, light brown, dark brown, and dark gray, poorly defined to well-defined bedding.
498.6	499.6	Marlstone, dark gray, massive. Some vertical fracture. Rich.
499.6	505.8	Marlstone, light brown and dark brown, massive to poorly defined bedding. Extensive vertical fracture with fracture faces lightly coated with light gray calcite.
505.8	508.7	Marlstone, tan and light brown, well defined bedding. Some vertical fracture with fracture faces lightly coated with clear calcite.
508.7	515.7	Marlstone, dark brown and dark gray, massive to well defined bedding. Rare inclusions 1-1/2 inches and less of dark brown analcite.
515.7	519.0	Marlstone, light gray and light brown, well defined
519.0	520.6	bedding. Low grade. Extensive vertical fracture. Marlstone, dark brown and light brown, massive to well defined bedding. Some vertical fracture with
		fracture faces lightly coated with calcite and red- dish-brown bitumen. A 0.2-foot band of light gray
520.6	526.6 A-groove	massive siltstone occurs at 520.0 feet. (Marlstone, tan and light gray, well defined bedding.) (Rare vertical fracture. Low grade to parren. Illustration No. SBR-2722P

Core samples from Savage Oil-Shale Development Company's Whiskey corehole drilled in the NE. 1/4 of sec. 24, T. 4 S., R. 98 W.,

Garfield County, Colorado (Con.)

defined bedding. Marlstone, tan and light brown, well defined bedding Common bands 1 inch and less of tan analcitized tuf No recovery from 530-531.2 feet. Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Common stringers and bands 1 inch and less of tan analcite tuff. A C.41-foot band of tan analcite tuff occurs at 534.7 feet. Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Rare vertical fracture. Marlstone, light gray, vuggy. A O.1-foot band of light brown and dark brown marlstone occurs at 547.6 feet (Mahogany marker.) Marlstone, light brown and dark brown, well defined bedding. A 1/2-inch band of light gray analcite occurs at 551.3 feet. Marlstone, dark gray, massive. Rich. Marlstone, dark gray, massive. Rich. Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Good grade to ric Marlstone, dark gray and dark brown, well defined bedding. Rich. Marlstone, light brown, dark brown, and dark gray, well defined bedding. Marlstone, light brown, dark brown, and dark gray, well defined bedding. Marlstone, light brown, dark brown, and dark gray, well defined bedding. Marlstone, light brown and dark brown, massive to well defined bedding. Marlstone, light brown and dark brown, massive to we defined bedding. Common bands 0.2 foot and less of light gray siltstone.	From	То	Description
Common bands 1 inch and less of tan analcitized tuf No recovery from 530-531.2 feet. Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Common stringers and bands 1 inch and less of tan analcite tuff. A 0.4-foot band of tan analcite tuff occurs at 534.7 feet. 539.7 547.5 Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Rare vertical fracture. 547.5 548.1 Analcite, light gray, vuggy. A 0.1-foot band of lig brown and dark brown marlstone occurs at 547.6 feet (Mahogany marker.) 548.1 551.4 Marlstone, light brown and dark brown, well defined bedding. A 1/2-inch band of light gray analcite occurs at 551.3 feet. 551.4 552.6 Marlstone, dark gray, massive. Rich. 560.7 561.7 Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Good grade to ric Marlstone, light brown, dark brown, well defined bedding. Rich. 570.6 Marlstone, light brown, dark brown, and dark gray, well defined bedding. 570.6 572.6 Marlstone, light brown, dark brown, massive to we defined bedding. Common bands 0.2 foot and less of light gray siltstone.		527.9	Marlstone, light brown and dark brown, massive to well defined bedding.
massive to well defined bedding. Common stringers and bands 1 inch and less of tan analcite tuff. A O.H-foot band of tan analcite tuff occurs at 534.7 feet. 539.7 547.5 Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Rare vertical fracture. 547.5 548.1 Analcite, light gray, vuggy. A O.L-foot band of lig brown and dark brown marlstone occurs at 547.6 feet (Mahogany marker.) 548.1 551.4 Marlstone, light brown and dark brown, well defined bedding. A 1/2-inch band of light gray analcite occurs at 551.3 feet. 551.4 552.6 Marlstone, dark gray, massive. Rich. 552.6 560.7 Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Good grade to ric Marlstone, dark gray and dark brown, well defined bedding. Rich. 561.7 570.6 Marlstone, light brown, dark brown, and dark gray, well defined bedding. Marlstone, light brown, dark brown, and dark gray, well defined bedding. Marlstone, light brown and dark brown, massive to we defined bedding. Common bands 0.2 foot and less of light gray siltstone.		531.8	Marlstone, tan and light brown, well defined bedding. Common bands 1 inch and less of tan analcitized tuff. No recovery from 530-531.2 feet.
539.7 547.5 Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Rare vertical fracture. 547.5 548.1 Analcite, light gray, vuggy. A 0.1-foot band of light brown and dark brown marlstone occurs at 547.6 feet (Mahogany marker.) 548.1 551.4 Marlstone, light brown and dark brown, well defined bedding. A 1/2-inch band of light gray analcite occurs at 551.3 feet. 551.4 552.6 Marlstone, dark gray, massive. Rich. 552.6 560.7 Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Good grade to rich bedding. Rich. 561.7 570.6 Marlstone, dark gray and dark brown, well defined bedding. Rich. 572.6 580.0 Marlstone, dark gray, massive to well defined bedding. Rich. 572.6 580.0 Marlstone, light brown and dark brown, massive to we defined bedding. Common bands 0.2 foot and less of light gray siltstone.	531.8	539•7	massive to well defined bedding. Common stringers and bands 1 inch and less of tan analcite tuff. A 0.4-foot band of tan analcite tuff occurs at 534.7
brown and dark brown marlstone occurs at 547.6 feet (Mahogany marker.) 548.1 551.4 Marlstone, light brown and dark brown, well defined bedding. A 1/2-inch band of light gray analcite occurs at 551.3 feet. 551.4 552.6 Marlstone, dark gray, massive. Rich. Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Good grade to ric Marlstone, dark gray and dark brown, well defined bedding. Rich. 561.7 570.6 Marlstone, light brown, dark brown, and dark gray, well defined bedding. 570.6 572.6 Marlstone, dark gray, massive to well defined bedding Rich. 572.6 580.0 Marlstone, light brown and dark brown, massive to we defined bedding. Common bands 0.2 foot and less of light gray siltstone.	539•7	547.5	Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Rare vertical
Marlstone, light brown and dark brown, well defined bedding. A 1/2-inch band of light gray analcite occurs at 551.3 feet. 551.4 552.6 Marlstone, dark gray, massive. Rich. 552.6 560.7 Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Good grade to ric Marlstone, dark gray and dark brown, well defined bedding. Rich. 561.7 570.6 Marlstone, light brown, dark brown, and dark gray, well defined bedding. 570.6 572.6 Marlstone, dark gray, massive to well defined bedding. 572.6 580.0 Marlstone, light brown and dark brown, massive to we defined bedding. Common bands 0.2 foot and less of light gray siltstone.	547.5	548.1	Analcite, light gray, vuggy. A 0.1-foot band of light brown and dark brown marlstone occurs at 547.6 feet. (Mahogany marker.)
551.4 552.6 Marlstone, dark gray, massive. Rich. 552.6 560.7 Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Good grade to ric 560.7 561.7 Marlstone, dark gray and dark brown, well defined bedding. Rich. 570.6 Marlstone, light brown, dark brown, and dark gray, well defined bedding. 570.6 572.6 Marlstone, dark gray, massive to well defined beddin Rich. 572.6 580.0 Marlstone, light brown and dark brown, massive to we defined bedding. Common bands 0.2 foot and less of light gray siltstone.	548.1	551.4	Marlstone, light brown and dark brown, well defined bedding. A 1/2-inch band of light gray analcite
Marlstone, light brown, dark brown, and dark gray, massive to well defined bedding. Good grade to ric Marlstone, dark gray and dark brown, well defined bedding. Rich. 560.7 570.6 Marlstone, light brown, dark brown, and dark gray, well defined bedding. 570.6 572.6 Marlstone, dark gray, massive to well defined beddin Rich. 572.6 580.0 Marlstone, light brown and dark brown, massive to we defined bedding. Common bands 0.2 foot and less of light gray siltstone.	551.4	552.6	
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Rich. 572.6 580.0 Marlstone, light brown and dark brown, massive to we defined bedding. Common bands 0.2 foot and less of light gray siltstone.			
defined bedding. Common bands 0.2 foot and less of light gray siltstone.			
			Marlstone, light brown and dark brown, massive to well defined bedding. Common bands 0.2 foot and less of light gray siltstone.
580.0 583.5 Marlstone, light brown and dark brown, massive to poorly defined bedding. Core badly fractured and broken. Fracture faces are lightly coated with	580.0	583.5	Marlstone, light brown and dark brown, massive to poorly defined bedding. Core badly fractured and broken. Fracture faces are lightly coated with
calcite and iron stain. 583.5 587.0 No recovery.	583.5	587-0	
			Marlstone, dark brown and dark gray, massive to well
589.3 591.5 Marlstone, light brown and dark brown, massive to well defined bedding.	589.3	591.5	Marlstone, light brown and dark brown, massive to
	591.5	593•3	Marlstone, dark brown and dark gray, massive to well
			Illustration No. SBR-2723P

Core samples from Savage Oil-Shale Development Company's Whiskey corehole drilled in the NE. 1/4 of sec. 24, T. 4 S., R. 98 W., Garfield County, Colorado (Con.)

Surface elevation 7561 feet Mahogany marker at 547.5 feet Total depth 623 feet

From	То	Description
593.3	596.0	Marlstone, light brown and dark brown, massive to well
596.0	604.1	defined and slightly contorted bedding. Marlstone, light brown and dark brown, generally massive to well defined bedding.
604.1	605.8	Marlstone, tan, light brown, and dark brown, well de- fined bedding.
605.8	610.2	Marlstone, light brown and dark brown, massive to well defined bedding. Core badly fractured and broken.
610.2		No recovery.
613.0	615.5	Marlstone, light brown, dark brown, and dark gray, well defined bedding. Core badly fractured and broken.
615.5	617.4	Marlstone, dark brown and dark gray, well defined bedding.
617.4	623.0	Marlstone, light brown and dark brown, well defined bed- ding. Common bands 0.4 foot and less of dark gray rich marlstone.
623.0		Bottom of hole.
X-ray	diffraction	patterns were obtained on the following samples:

243 Found to be analcite with calcite.

384 Found to consist of analcite, quartz, dolomite, and calcite.

